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SIGNAL CORPS OFFICER TRAINING PROGRAM

DEPARTMENT OF THE ARMY

JANUARY 1956

SIGNAL CORPS OFFICER TRAINING PROGRAM

CHANGES }
 No. 1 }

HEADQUARTERS,
 DEPARTMENT OF THE ARMY
 WASHINGTON 25, D. C., 29 July 1958

DA Pam 11-9, 26 January 1956, is changed as follows:

On front cover change "No. 11-19" to read: No. 11-9.

48. (Superseded) Commercial Communications

a. Where Conducted. This course will be conducted in three phases. Phase I (10 weeks) will be conducted at the U. S. Army Signal School, Fort Monmouth, N. J. Phase II (23 weeks) will be conducted by either the New Jersey Bell Telephone Company, Newark, N. J., or the New York Telephone Company, Brooklyn, N. Y. Phase III (12 weeks) will be conducted by the Long Lines Department of the American Telephone and Telegraph Company, New York City. Seven weeks of Phase III will be in Philadelphia, Pennsylvania and vicinity, and the last 5 weeks in New York City.

b. Purpose. This course is designed to train qualified Signal Corps officers in the applied techniques of commercial communications. The course will provide on-the-job training so that each officer will become thoroughly familiar with all phases of commercial communications. It is expected that upon completion of the course, each officer will be so assigned that full value will be obtained from the training.

c. Requirements. Officers selected for this training will—

- (1) Meet the general admission requirements.
- (2) Be a graduate of the Signal Officers Advanced Course or possess the necessary equivalent in wartime practical experience.
- (3) Have an aptitude for work in the communications field.
- (4) Have at least 2 years of college (or equivalent), including mathematics through trigonometry, and physics.

d. Duration of Course. Forty-five weeks.

e. Level. No degree is granted.

f. Curriculum. The course of instruction will be approximately as outlined below.

- (1) Teletype, step by step dial central office fundamentals, and mobile radio.
- (2) Splicing and testing: Emergency, advanced testing, capacity unbalance, cable fault location.
- (3) Installation: Fundamentals, key plans, and P. B. X.
- (4) Repairs test desk: Fundamentals, key plans, and P. B. X.

- (5) Central office: Fundamentals of manual, circuits and power, trunks—manual and dial, test desk, miscellaneous auxiliary circuits.
- (6) Engineering: Toll engineering, outside plant engineering, traffic engineering and methods, dial cutover procedure, commercial engineering including rates and tariffs, and general review.
- (7) Long lines carrier, repeater and transmission principles and circuits.
- (8) Microwave and carrier fundamentals and components.
- (9) Site location and engineering planning.

[AG 353 (15 Jul 58)]

By Order of *Wilber M. Brucker*, Secretary of the Army:

MAXWELL D. TAYLOR,
General, United States Army,
Chief of Staff.

Official:

HERBERT M. JONES,
Major General, United States Army,
The Adjutant General.

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Div (5)	MAAG (5)
Sig Gp (6)	Mil Mis (5)
NG: State AG (3).	
USAR: None.	

For explanation of abbreviations used, see AR 320-50.

PAMPHLET }
No. 11-9 }

DEPARTMENT OF THE ARMY
WASHINGTON 25, D. C., 26 January 1956

SIGNAL CORPS OFFICER TRAINING PROGRAM

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INTRODUCTION

This manual is intended to present for reference use a compilation of general information on educational and training opportunities available to Signal Corps officers. This information will serve as a guide for Signal Corps officers who desire to develop their qualifications for positions of greater importance and responsibility.

The information presented herein covers a wide field of available training opportunities on which a well planned Army career is based. It not only presents the Signal courses but courses from the Joint Service Colleges, Army Service Colleges, and other branches of the Armed Services. No attempt has been made to outline in detail the many ways an officer may increase his capabilities through outside study. However, if one aspires to a position of high command, he should plan a well rounded background in technical and command positions rather than following a particular specialty.

The principles of Career Management described in this manual for determining duty assignments, and for the selection of Signal Corps officers for attendance at appropriate schools, are in accordance with the provisions of current DA publications, directives and policies governing the Career Management of Army officers.

The current educational status of Signal Corps officers of Regular Army, Reserve and National Guard officers on extended active duty is depicted in the Educational Level Chart (fig. 3). It is to the interest of every officer, regardless of component, to exploit to the maximum extent the opportunities for personal development and improvement of his formal education.

Detailed information on Army courses mentioned in this manual is contained in DA Pam 20-21. Every effort has been made to insure the accuracy of the entries in this manual which represents the best information available at the time of publication. However, this information is subject to frequent change, and it is advisable to consult available SR's, AR's, and DA circulars and pamphlets on education and training when definitive action is contemplated. This manual will be amended or reissued as required. Suggestions for improvement of the manual are solicited and should be submitted to the Chief Signal Officer, Washington 25, D. C.

SECTION I

THE CAREER MANAGEMENT PROGRAM

1. Purpose

The Signal Corps Career Management Program has been developed for the information and guidance of all personnel having jurisdiction over the duty assignments of career Signal Corps officers and as a guide for each Signal Corps officer in planning his own Army career. The Career Pattern Chart is in no sense a rigid, fixed, or preset course. Reserve officers who have indicated that they intend to make the Army their career, by applying for extended active duty at the termination of their initial 2-year active duty commitment, will be similarly assigned so far as the overall personnel situation permits. It does not project the duty assignment for any individual for any given date. Rather, it fixes the general means by which the objective will be reached. The individual is not relieved of his basic responsibilities to improve his capabilities by any and all means available to him. Career management rests largely with the individual in that his personal development and his record of achievement are still the basis on which his future is determined. The career management principles are no substitute for personal initiative. This cannot be emphasized too strongly.

2. Basic Training Period

The assignment pattern for the first 5 years of commissioned service under this program is quite rigid. Each Regular Army Signal Corps officer is required to complete all of the prescribed assignments for that period. The Chief Signal Officer will make assignments to civilian universities. Assignments to the various duties prescribed in Signal Corps units will be made by the unit commanders, under the supervision of Signal officers of the major commands. The required rotation of Regular Army officers as outlined in paragraphs 10 and 30, TM 20-605, has been reinstated after being suspended during the Korean emergency. The provisions of SR 650-50-10 may be used to assure limited rotation for certain individuals. In general an officer will not be considered for civilian schooling during the first 4 years of commissioned service nor for any special assignments during the first 5 years of commissioned service. Examples of assignments in two types of units (Division Signal Company and Signal Battalion) are indicated below:

a. Division Signal Company. Each Regular Army Signal Corps lieutenant will, during the period of his assignment to this type organization, be rotated throughout the company on all duties commensurate with his grade. The duties are as follows:

- (1) Supply and Mess Officer..... (Co. Hqs).
- (2) Photographic Officer..... (Photo Sec).
- (3) Message Center Officer..... (Msg Cen & Msgr Sec).
- (4) Wire Operation Officer..... (T&T Sec).
- (5) Radio Relay Officer..... (Rad Relay Sec).
- (6) Field Line Construction
Officer (Cons Plat).
- (7) Radio Officer (Rad Plat Hq).

b. Signal Battalion. Each Regular Army Signal Corps lieutenant assigned to duty with a Signal Battalion will be rotated as has been indicated above on the various assignments calling for lieutenants in the battalion. These assignments are—

- (1) Assistant Operations—Training S3.
- (2) Photo Officer.
- (3) Signal Repair Officer.
- (4) Executive (Co).
- (5) Radio Relay Officer.
- (6) Aviation Officer.
- (7) Message Center Officer.
- (8) Radio Officer.
- (9) Telephone and Telegraph Operations Officer.
- (10) Carrier System Officer.
- (11) Telephone and Telegraph Maintenance Officer.
- (12) Telegraph Construction Officer.

3. Specialized Training Period

Selection of a career field for specialization between the 5th and 17th year of a commissioned service will be made by the Chief Signal Officer. Consideration will be given to the number of officers required in each field, each officer's qualifications and each officer's individual preference. Assignments during this period will generally be determined by requirements of the Army, the individual's preference as listed on his annual preference card, and performance of duty as reflected by the officer's efficiency report file. If the Chief Signal Officer finds that an officer's career development is being neglected through improper duty assignments, he will direct that corrective action be taken. Selection of students for service schools, training in civilian universities, and other special training will be made by the Chief Signal Officer,

except where quotas are allotted to subordinate commands with specific authorization to select candidates.

4. Career Field Specialization

An officer may expect to spend a minimum of 30 percent of his time in assignments appropriate to his career field; 30 percent of his time may be spent in other career field assignments but not more than 40 percent of his time will be spent in assignments not material to any of the five career fields. All career officers should not let specialization become so paramount that they fail to obtain well rounded experience. Career officers in the grade of lieutenant colonel and above can expect to be assigned to any field, or head up any combination of fields, such as Troop Duty, Tactical Duty, Technical Duty in Radio, Radar, Wire, Communications Center and Photography; also Research and Development, Procurement and Distribution. Typical assignments in each of the career fields and assignments not material to the five career fields are—

a. Communications.

- (1) Division, Corps, and Army Signal Staffs.
- (2) Instructors, The Signal School.
- (3) Division Signal Company, Corps Signal Battalion and similar field Signal units.
- (4) Special Communications Course at The Signal School or in commercial communication organizations.
- (5) Theater, Base Section ZI Army Signal Staffs.
- (6) Army Communication Service Division, OCSigO.
- (7) Alaska Communication System.
- (8) Plant Engineering Agency.
- (9) Signal service type units including construction units.

b. Procurement and Distribution.

- (1) Any supply duty in any type of Signal Corps unit, staff or operating agency.
- (2) Signal Corps depots.
- (3) Signal Corps Supply Agency (Stock Control—Procurement).
- (4) Procurement and Distribution Division, OCSigO.
- (5) Instructor, The Signal School.
- (6) Advanced business administration (civilian school).
- (7) Special courses in related subjects at The Signal School or in industry.

c. Pictorial.

- (1) Signal Corps photo units.
- (2) Photo Sections in any Signal Corps unit or staff section.
- (3) Army Pictorial Service Division, OCSigO.

- (4) Signal School, Laboratory or Libraries.
- (5) Training in motion picture production.
- (6) Television production.
- (7) Signal Corps Pictorial Center.
- (8) Army television studios and television units.

d. Research and Development.

- (1) Any technical assignment under *a*, *b*, and *c* above.
- (2) Signal Corps Engineering Laboratories.
- (3) Research and Development Division, OCSigO.

e. Army Security Agency.

- (1) Command or operating assignments in Headquarters, Army Security Agency or its major field installations.
- (2) Army Security Agency Basic or Advanced Officer Course (Part I and Part II).
- (3) Civilian Component instructor in Army Security Agency subjects.
- (4) Instructor at Army Security Agency School.

f. Assignments Not Material to the Five Specified Fields.

- (1) Department of the Army General and Special Staff.
- (2) General Staff Corps with troops.
- (3) Duty with Civilian Components.
- (4) Instructor at United States Military Academy.
- (5) Any OCSigO assignment, except as noted under *a* through *d* above.
- (6) Any Branch Immaterial assignment.
- (7) Signal Officer Advanced Course, The Signal School.
- (8) Signal Supply, Advanced Course, The Signal School.
- (9) Command and General Staff College.
- (10) Armed Forces Staff College.
- (11) Other Army, Air Force, Navy, State Department, or foreign service schools.
- (12) Civilian university or training in industry not listed under the officer's selected field.

5. General Training Period

The period of general training is between the 17th and 21st years of commissioned service and is for the purpose of preparing officers for positions of highest responsibility. The most promising officers completing 17 years of commissioned service will be selected each year by the Chief Signal Officer and given tours of duty in responsible assignments in at least two fields other than the one in which he specialized. Those who show aptitude for highly responsible overall supervisory duty will be given additional assignments training them for the highest Department

of the Army and theater positions in time of war. Typical assignments during the period are—

- a. Repeat tours in the Department of the Army.
- b. Branch chief level assignments in OCSigO or theater staffs and Headquarters, Army Security Agency.
- c. Instructors at Command and General Staff College, Armed Forces Staff College, Army War College, Industrial College of the Armed Forces and National War College.
- d. Supervisory duties at The Signal School, Laboratories, Procurement and Supply activities.
- e. Army Area assignments.
- f. Tactical unit assignments.
- g. Branch Immaterial assignments.

6. Individual Accomplishments

The Career Management Program is designed to rotate all career Signal Corps officers through the various phases of training and varied duty assignments. However, the small quotas for high level service schools and civilian schools and the limited requirements for the more desirable assignments make it necessary that officers be selected for such assignments on the basis of individual merit.

Competition for selection to attend high level service schools becomes keener with each successive school. Although over half of all Regular Army Signal Corps officers can expect to attend the Command and General Staff College, less than 20 percent can ultimately attend the highest level military schools. Since selections are made from among eligible officers on a basis of individual accomplishment, it is extremely important that each officer pay close attention to his performance of duty as reflected by his efficiency reports, academic standings, and other personnel records.

As a guide toward self-evaluation which should enable an officer to take timely action to overcome deficiencies, the following factors considered by the school selection board are listed:

- a. How well did he perform on his previous assignments?
- b. What was his class standing in previous military and civilian schools?
- c. Was he recommended for further schooling upon completion of previous schools?

The weight given to the above factors varies under different circumstances; *for example*, when evaluating an individual officer's efficiency record for school selection purposes, consideration is given to the types of duty assignments involved and the degree of improvement shown over a reasonable period of time. Poor

efficiency records while a junior officer are often overlooked if substantial improvement has been made in recent years.

Officers who fail to be selected for high level service schools should not become discouraged but should become even more determined to improve their relative standing by outstanding performance of duty and through other means such as enrollment in appropriate Army Extension Courses. Although school attendance is highly desirable, since it offers the best means for

March 1955

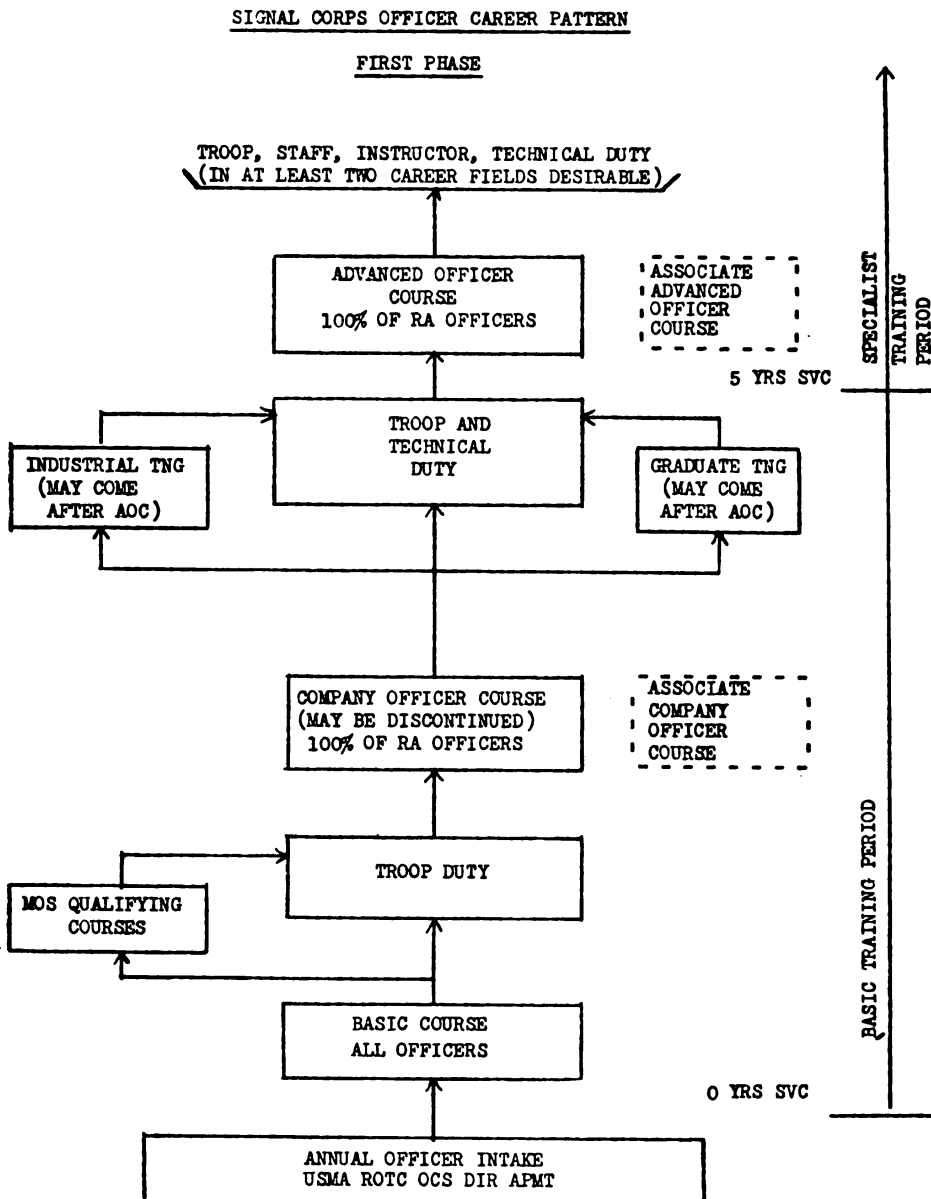


Figure 1. Signal Corps Officer Career Pattern, First Phase.

acquiring knowledge in a minimum of time, it is not essential to a successful military career. An officer not selected for a full length branch course should apply for the associate course through his commander. Further development can be effected by participating in the special college program for all officers (sec. VII) and through the reading list (sec. IX).

March 1955

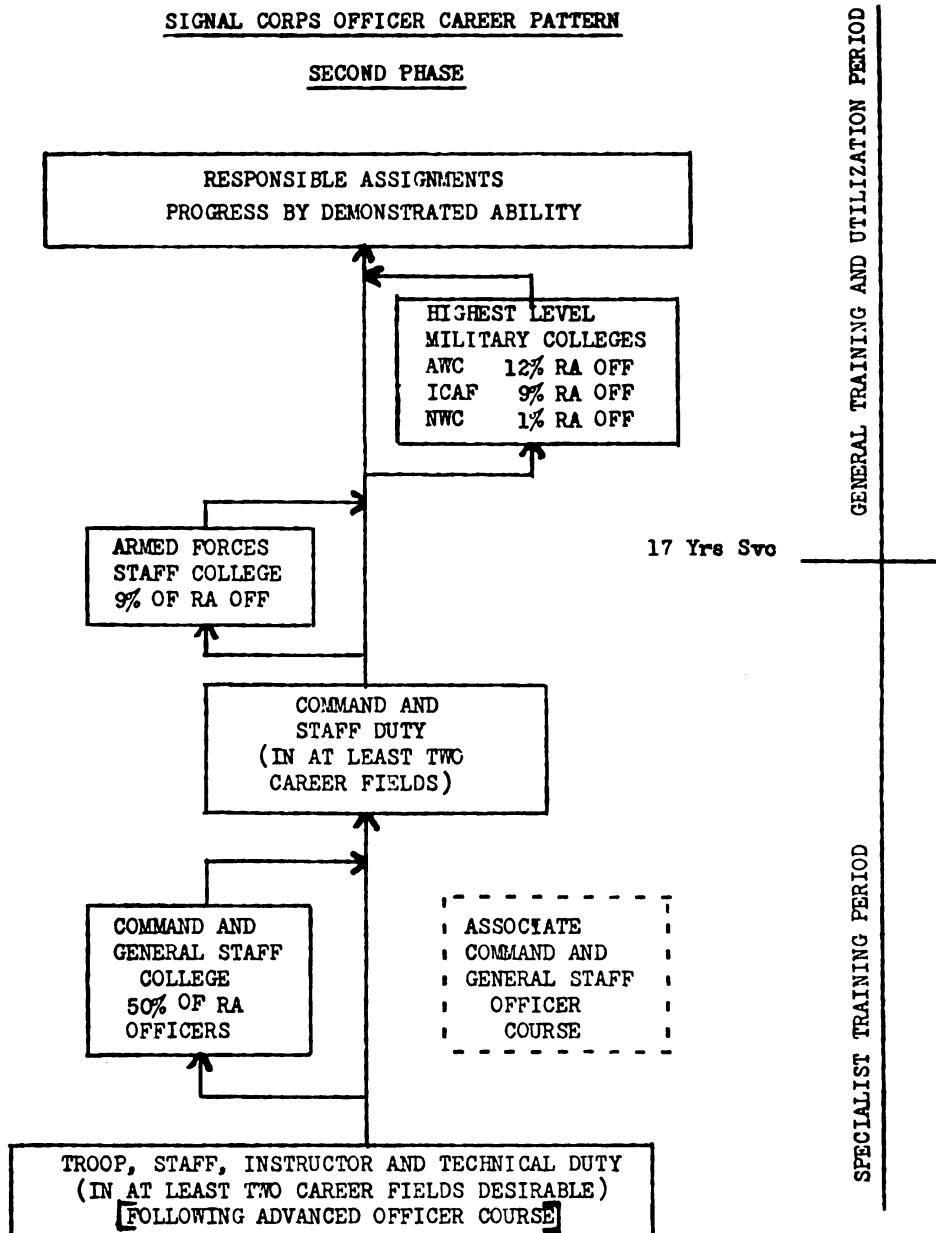


Figure 2. Signal Corps Officer Career Pattern, Second Phase.

SECTION II

GENERAL EDUCATIONAL PROGRAM

7. Mission

The mission of the educational system for officers of the **Army** is to provide a balanced system of progressive education which stimulates progress in the art of war and which, together with actual duty in command and staff positions, will insure the development of personnel capable of efficient leadership in the preparation for war, the prosecution of war, and the execution of responsibilities of the Armed Forces of the United States after cessation of hostilities.

8. Objectives

a. To prepare officers for assignments to appropriate command, staff, and specialist duties of all echelons, in peace and war.

b. To develop the initiative, resourcefulness and professional skills of personnel of the Army, with emphasis on leadership and the power of decision.

c. To provide a general knowledge of the organizational characteristics, operating procedures, and employment of the other services of the military establishment to the extent necessary to insure effective teamwork.

d. To promote mutual respect, confidence, understanding and coordination of effort among Army, Navy, Air Force, other governmental agencies, and civil activities.

e. To stimulate constructive thought to insure constant appreciation of, and adjustment to, the trends which may affect warfare of the future and to point the way to improvement in the organization, equipment, and employment of the Army.

9. The General Educational Career Pattern

The various schools and duty training assignments available to Signal Corps officers during their career are outlined in section I. The career pattern for Signal Corps Officers is directed along tactical lines to qualify them as "Combat Signal Officers" primarily and "Technical Signal Officers" secondarily. A number of Signal Corps Officers are given an opportunity to prepare for responsible positions in the "Logistics" field.

10. Signal Corps School System

a. The Signal Corps School System is an adaptation of the Army system which is based on the "Report of the DA of the Army Board on Educational Systems for Officers," as amended 23 January 1951.

b. Officer Courses will emphasize the following:

- (1) Basic officer training to include individual combat training. (This instruction must be designed to complement and not to duplicate the former training received during the precommission training period.)
- (2) Unit and Organization tactics. (Stress in all courses for the command level to which the majority of the officer graduates will be assigned.)
- (3) Tactics and technique of Signal Communication. (Stress in all courses for the command level to which the majority of the officer graduates will be assigned.)
- (4) Officer Specialist training. (Selected officers only.)

11. Selection of Students for Career Courses

a. Attendance of Regular Army and Career Reserve officers at the Company Officers Course, Advanced Officers Course, Command and General Staff Officers Course, and higher-level service school courses, is scheduled by the Signal Corps Career Management Branch, Personnel and Training Division, Office of the Chief Signal Officer. Officers will not make personal application for attendance to these career courses. Personal application is necessary, however, for attendance at schools of other services, post-graduate training at civilian institutions, specialized training in industry, schools of other branches of the Army, and foreign schools.

b. Those officers selected for the Regular Company Officers Course and the Regular Advanced Officers Course will be notified of their selection by Signal Corps Career Management Branch. Reserve officers not selected for these courses should submit applications for enrollment in the Associate Company Officers Course and the Associate Advanced Officers Course. Such applications should be submitted through command channels to the appropriate major commander.

12. Statement Required by Reserve Officers

Reserve officers on extended active duty who are selected to attend service school courses over 5 months' duration will be required to sign a statement volunteering to remain on active

duty for at least 1 year following completion of the course unless sooner relieved for the convenience of the Government. Exceptions will be authorized only when the length of service required after completion of a particular course has been separately established. See SR 350-20-1.

SECTION III

SIGNAL CORPS COURSES

13. Career Courses

- a. *Signal Officer Basic Course (10 Weeks)* 11-0-A.

Purpose: To provide basic branch training for newly commissioned Signal Corps Officers so that they will be able to perform duties and carry out responsibilities of leaders of platoons and sections of various Signal units. MOS for which trained: None.

- b. *Signal Company Officer (27 Weeks)* 11-0-1.

Purpose: To provide branch training to officers so that they are thoroughly grounded in the duties and responsibilities appropriate to company grade Signal Corps officers. MOS for which trained: None.

- c. *Associate Signal Company Officer (12 Weeks)* 11-0-2.

Purpose: To qualify company grade officers as commanders of signal detachments, platoons, and companies; as staff officers of signal battalions and groups; as special staff officers of battalions and appropriate higher headquarters; and to perform commensurate company grade duties. MOS for which trained: None.

- d. *Signal Officer Advanced (36 Weeks)* 11-0-3.

Purpose: To provide advance branch training to officers so that they are thoroughly grounded in the duties and responsibilities appropriate to field grade Signal Corps officers. MOS for which trained: None.

- e. *Associate Signal Officer Advanced (12 Weeks)* 11-0-4.

Purpose: To provide branch training to officers so that they have a working knowledge of the duties and responsibilities appropriate to field grade Signal Corps officers. MOS for which trained: None.

- f. *Signal Supply, Advanced (12 Weeks)* 11-0-23.

Purpose: To train officers in the broad aspects of signal supply activities including requirements, national stock control and supply control. MOS for which trained: None.

14. Refresher Courses

- a. *Signal Company Grade Officer (4 Weeks)* 11-0-13.

Purpose: To provide refresher training in the duties and responsibilities appropriate to company grade Signal Corps officers. MOS for which trained: None.

b. *Signal Officer Field Grade (4 Weeks)* 11-0-14.

Purpose: To provide refresher training in the duties and responsibilities appropriate to field grade Signal Corps officers. MOS for which trained: None.

c. *Signal Officer Refresher (Reserve Component) (2 Weeks)*
11-0-27.

Purpose: To provide refresher training in tactics, techniques, and materiel appropriate to Signal Corps Company and field grade Reserve component officers. MOS for which trained: None.

15. Specialist Courses

a. *Signal Supply Basic (8 Weeks)* 11-0-7.

Purpose: To train officers to direct and supervise the receipt, storage, and issue of Signal Corps supplies and equipment. MOS for which trained: Signal Supply Officer (4400).

b. *Radar Maintenance and Repair, Officer (12 Weeks)*
11-0-19.

Purpose: To train officers to supervise the maintenance and repair of radar equipment. MOS for which trained: Radar and Countermeasures Equipment Repair Officer (0145).

c. *Communications Center Operations (7 Weeks)* 11-0-22.

Purpose: To train officers for duty in field and fixed communications centers. MOS for which trained: Field Communication Center Officer (0221), Fixed Station Communication Center Officer (0222), and Communications Center Cryptographic Officer (0224).

d. *Signal Equipment Maintenance and Repair, Officer (8 Weeks)* 11-0-24.

Purpose: To train officers to direct or supervise the receipt, storage, testing, maintenance, repair and overhaul of damaged or defective Signal Corps equipment at a depot or field maintenance repair shop. MOS for which trained: Signal Equipment Maintenance and Repair Officer (4415).

e. *Wire Communications (11 Weeks)* 11-0-25.

Purpose: To train officers in the supervision, management, and planning of construction, installation, employment, operation, and maintenance of telephone and telegraph facilities and equipment in tactical and fixed plant military communications systems. MOS for which trained: Telephone and Teletypewriter Officer (0400).

f. *Field and Fixed Station Radio (11 Weeks)* 11-0-26.

Purpose: To train officer personnel to direct and supervise the installation, operation, and organizational maintenance of field and fixed station radio equipment. MOS for which trained:

Field Radio Officer (0501) and Fixed Station Radio Officer (0502).

g. Electronic Warfare (12 Weeks) 11-0-28.

Purpose: To train officer personnel to direct and supervise electronic warfare activities. MOS for which trained: Electronic Warfare Analyst Officer (MOS 0143) and Electronic Warfare Officer (MOS 0144).

h. Microwave Radio Officer (12 Weeks) 11-0-32.

Purpose: To train officer personnel to direct and supervise the installation, operation and organizational maintenance of microwave radio equipment. MOS for which trained: Microwave Radio Officer (0503).

i. Photographic Unit Commander (10 Weeks) 11-0-39.

Purpose: To train selected officer personnel to direct, administer, and supervise photographic, film distribution, and television activities on staff or unit level. MOS for which trained: Photographic Unit Commander (8500).

16. References

Additional information on school courses may be found in DA Pam 20-21, "The Army School Catalog."

17. Method of Making Application

a. Officers Assigned to OCSigO Installations and Activities. Application for short term courses should be submitted in four copies through appropriate command channels on DA Form 1049 (app. II), to the Chief Signal Officer, ATTN: SIGPT-3, 60 days prior to reporting date of the desired class.

b. Officers Assigned to Other Commands. Applications should be submitted through command channels to the appropriate major commander.

SECTION IV

OTHER SERVICE SCHOOLS

18. General

Service schools and special courses considered in this section are listed below. For detailed information pertaining to various Army service school courses, including Command and General Staff College, see DA Pam 20-21. Information covering the scope and prerequisites of the joint colleges is contained in SR 350-195-1.

a. Joint Colleges.

- (1) Armed Forces Staff College, Norfolk, Virginia.
- (2) National War College, Washington, D. C.
- (3) Industrial College of the Armed Forces, Washington, D. C.

Note. The Industrial College also conducts a correspondence course entitled "Emergency Management of the National Economy." For further information, address inquiries to: Commandant, Industrial College of the Armed Forces, Fort Lesley J. McNair, Washington 25, D. C.

b. Army.

- (1) Army War College, Carlisle Barracks, Pennsylvania.
- (2) Command and General Staff College, Fort Leavenworth, Kansas.
Command and General Staff Officer Course.
Associate Command and General Staff Officer Course.
- (3) Infantry School, Fort Benning, Georgia.
Airborne Course.
Ranger.
- (4) The Chemical Corps School, Fort McClellan, Alabama.
CBR Course.
- (5) Artillery School, Fort Sill, Oklahoma.
Guided Missile Staff Officer.
- (6) Ordnance Guided Missile School, Huntsville, Alabama.
Ordnance Guided Missile Officer.
- (7) Army Aviation Training.
Army Aviation Tactics.
Army Helicopter Aviation Tactics.
H-21 Helicopter Transition Flight Training.
Twin-Engine Transition Flight Training.
Instrument Flying.
AFF Helicopter Pilot Training, Officer.

Army Primary Flight Training.

Army Cargo Helicopter Pilot Training.

c. *Naval Courses.*

(1) *Naval Warfare (2 Years).*

Purpose. To further an understanding of the fundamentals of warfare in order to prepare officers for higher command.

Scope. This course comprises two parts, each of which is 1 academic year in length. Students may be ordered to take either year of the course. In the first year emphasis is to be on the integrated employment of the elements of naval power in the accomplishment of the Navy's missions; in the second year the emphasis is on the strategic employment of sea and naval power in the furtherance of national objectives. In both years the importance and methods of participation in Joint and Combined committee work is studied.

Prerequisites. Course in Naval Warfare (First Year) is for senior commanders and junior captains taking the 2 year course, and for junior commanders taking only the first year; the (Second Year) is for officers with 20 to 24 years of commissioned service, or equivalent or 15 to 20 years' commissioned service who have successfully completed the Marine Corps Amphibious School Senior Course, the Naval War College Command and Staff Course or higher level courses including the Course in Naval Warfare (First Year); Officers of the Marine Corps, Army, Air Force, Coast Guard, and representatives of the State Department and certain other government agencies, are eligible for the Course in Naval Warfare (either year) in accordance with limited quotas established by the Bureau of Naval Personnel. Officers selected will be of equivalent rank and length of service corresponding to the naval officers enrolled.

(2) *Naval Command and Staff Course (10 Months).*

Purpose. To provide lieutenant commanders and equivalent ranks with an opportunity to further their understanding of the fundamentals of warfare.

Scope. A study in the fundamentals of warfare with emphasis on the operational functions of command, and the organization, functions, and procedures of operational staff, including participation in Joint and Combined committee work which must be one of the objectives of the modern military educational system.

Prerequisites. Naval officers normally of the rank of lieutenant commander. The course is open to officers of the Marine Corps, Army, Air Force, and Coast Guard in accordance with limited quotas established by the Bureau of Naval Person-

nel. In general, officers selected will be of equivalent rank and length of service corresponding to the naval officers enrolled.

d. Air Force Courses.

(1) *Air War College (10 Months).*

Purpose. To prepare carefully selected Air Force officers for command and key staff assignment.

Scope. The Air War College offers the highest level professional education of all schools operated by the Air Force. It is the purpose of this college to promote sound concepts in strategy, and other aspects which lead to the most effective development and employment of the air arm.

Prerequisites. Selection of students to attend the Air War College is made at Headquarters USAF, from temporary Colonels who are permanent Lieutenant Colonels or below, with less than 20 years promotion list service; USAFR and ANG Colonels under 45 years of age. Selected officers of other services. Security clearance to include TOP SECRET.

(2) *Air Command and Staff Course (38 Weeks).*

Purpose. To provide officers with an effective approach to the command tasks of Air Force Groups and wings and to the principal staff tasks of Air Force Wings and numbered air force headquarters.

Scope. Stresses sound concepts, principles, and Air Force policy and doctrine; integrated staff action; weapons systems; problems in development, employment and support of air units; problem solving, speaking, writing, conference techniques and human relations; comprehensive coverage of management, civic responsibilities, and ethical standards in the Air Force; relative roles of the Army, Navy, Marine, and Air Force establishments.

Prerequisites. Selection of students to attend this course is made by headquarters USAF from Majors and Lieutenant Colonels who have not less than 10 nor more than 14 years, 11 months and 29 days promotion list service for Regular Air Force officers. Selected officers of other services. Security clearance to include TOP SECRET.

19. Selection Procedures

Selection of officers for attendance at high level schools is made on the best qualified basis by the Senior Military Personnel Board, Office of the Chief Signal Officer, and approved by the Chief Signal Officer. Selection procedure is as follows:

a. A career summary of each officer within the zone of consideration is furnished each member of the Senior Military Personnel Board. Each member independently selects those officers

he considers best qualified for high level training. Primary factors for consideration are—

- (1) Efficiency and manner of performance.
- (2) Civilian and military education.
- (3) Military experience in relation to future composite value to the Army and the Signal Corps.
- (4) Indicated ability to benefit from future service schooling.

b. Each officer is clearly in competition with all other officers in the zone of consideration. All officers are considered each year until they are selected or become ineligible.

c. The Senior Military Personnel Board, on completion of independent selections, meets in executive session to arrange those selections in an order of priority. The results of the board's actions are submitted to the Chief Signal Officer for approval whereby the list becomes final. Officers are nominated for attendance at high level schools in accordance with their priority standing on the approved list of selectees.

SECTION V

INDUSTRIAL MOBILIZATION TRAINING PROGRAM

20. Mission

The Industrial Mobilization Training Program was established to provide personnel who are qualified to solve and administer the solution of problems of industrial mobilization, and procurement planning in order to insure efficient operation during both peace and war. This training is integrated into the careers of the participating officers as a part of their formal education and training.

21. Program Phases

This program consists of five phases which so far as practicable, are followed in sequence with the minimum of delay between phases. Information on scopes of the following phases may be obtained in SR 350-70-1:

- a. PHASE A.* Postgraduate training in business administration (1 to 2 years).
- b. PHASE B.* Training in American industry (3 to 6 months).
- c. PHASE C.* Procurement and Distribution training assignment—operational level (1 to 3 years).
- d. PHASE D.* Training at the Industrial College of the Armed Forces (10 months).
- e. PHASE E.* Procurement assignment—staff level. Duration of this phase is the remainder of the officer's career.

22. Selection Procedures

Officers desiring to pursue this course of training must apply for PHASE A (Postgraduate training for the Degree of Master of Business Administration). Interested officers will indicate on their application that they desire to continue in the Industrial Mobilization Training Program. Refer to SR 350-70-1 for further details.

SECTION VI

TRAINING IN CIVILIAN INSTITUTIONS

23. General Discussion

The program outlined in this section is based on long-range plan to meet the Signal Corps' requirements for technical experts who are needed to carry out the mission assigned to the Chief Signal Officer. Military communication has become so technical and complicated that graduates of an ordinary university course or graduates of the United States Military Academy do not have the required technical background to perform all the duties that must be performed by Signal Corps officers. The program has been designed to meet the objective outlined in AR 350-200, as amended, which provides that this type training is to augment the training conducted in service schools in order to provide—

a. Adequate training in appropriate fields to produce a limited number of officers who are capable of recognizing and coping with the political, economic, scientific, and social problems which are related to the military duties they perform.

b. A limited number of officers specialized in scientific fields and capable of working with civilian scientists and directing research and development in military fields.

c. A limited number of officers specialized in the fields of personnel management and/or administration and industrial management.

d. Essential technical training which is not provided in service schools and which is necessary for the proper performance of assigned duties.

e. Essential language and area training which is not conducted in service schools and which is necessary for the proper performance of assigned duties.

f. Qualified instructors for the United States Military Academy and the Army service schools.

24. Courses

Graduate courses will be approximately 18 months' duration. Courses will begin in June or September of each year, depending upon the number of spaces allotted at civilian institutions. The Chief Signal Officer will prescribe in general terms only the core subjects and the end to be achieved in the case of each student. Subject to the above, each officer will select, in consultation with

the dean of the department concerned, the curriculum best suited to his needs, within the prescribed limits. Each officer will carry the normal number of hours of work prescribed for graduate work in the selected field. The level of education to be attained is fulfillment of the requirements for a Master's degree or, in certain cases, the degree of Doctor of Philosophy. Should unusual circumstances arise which would prevent a student from completing the prescribed graduate work within the time allotted, the student should request the university to initiate action to obtain the necessary extension. The procedure for obtaining extension of time is for the university to furnish the contracting office (usually the Army Area Headquarters) with information as to the additional time required, cost, et cetera, in order that the contract may be amended.

25. Cost

The cost of training included in this section will be defrayed from appropriations which are available to the Signal Corps for this purpose. For further information, see AR 350-200.

26. General Admission Requirements

Training at civilian educational institutions will be provided for the most qualified officers who volunteer for such training. Although the program was designed to train regular Army officers it has since been expanded to include a limited number of highly qualified reserve officers. Officers who receive training in programs of instruction of more than 5 months' duration will be required to sign a statement to the effect that they will not seek separation from the service for 4 years following the completion of their course in accordance with AR 350-200. The prospective student must meet the entrance requirements of the education as determined by careful screening through appropriate tests or by consideration of past academic records. Age limits will be determined by the nature of the specialty for which the student is to be trained; however, the general policy in this respect will be to restrict additional education in civilian schools as follows: Maximum Age Limits Upon Completion of Training: Master's degree level or equivalent—37; Doctor's degree level or equivalent—42.

27. Application Procedures

Officers who wish to be enrolled in one of the courses of training in civilian institutions or industry should submit their application on DA Form 1618-R in (app. I). This form will be

reproduced locally on 8- by 10½-inch paper. This application should be forwarded through the applicant's immediate commanding officer and should be addressed to the Chief Signal Officer, ATTN: SIGPT-3, Washington 25, D. C. Applications are desired from interested officers regardless of present status of availability. Qualified officers will normally be scheduled for enrollment at least 1 year in advance and may be scheduled for enrollment as long as 3 years in advance. In general, officers will not be scheduled for enrollment until completion of normal tours of duty. The question of availability will be considered by the Office of the Chief Signal Officer sufficiently in advance of the enrollment date.

a. Graduate Training. Two copies of the applicant's transcript of all his college records, except the USMA, should be inclosed. Transcripts of the USMA graduates will be secured by the Chief Signal Officer. Evidence of any special studies completed or other research or academic achievement which may influence the selection should be inclosed. A report of interview as prescribed by AR 350-200, should be included, or a statement to the effect that this interview has been performed and that the report is being forwarded by the interviewing officer.

b. Industrial Training. Applications should be submitted as above; however, college transcripts are not required.

28. Interview of Applicants

AR 350-200 requires that each training agency establish a system for the personal interview of prospective students. It is desired that each applicant make his own arrangements to be interviewed by a senior field grade officer, preferably of the Signal Corps, and that he make arrangements to forward the report of the interview or have the interviewing officer forward this report as prescribed in the previous paragraph. The interviewing officer will explain the purpose of the program as stated in the data regarding each course and will explain that the officer's next assignment will be in a position where he will be able to use the knowledge gained in this training. The prospective student should also realize that such specialized training may be followed by assignments in the same specialty until the specialist training period is completed. Officers receiving the degree of Doctor of Philosophy will probably continue in specialized work even after the normal specialized training period is completed.

29. Progress Reports Civilian Universities

Each student attending civilian universities will furnish the Chief Signal Officer, ATTN: SIGPT-2 the following information in letter form:

a. Courses of Instruction To Be Pursued. Students will furnish a list of courses of instruction to be pursued at least 1 week prior to starting date of each semester.

b. Grades. Students will submit grades received for each semester 1 week after the university has advised the student of his grades.

c. Miscellaneous. Students will furnish information on degrees awarded, special honors received, difficulties encountered, mailing address, and telephone number. Students are encouraged to submit, at any time, comments or recommendations relative to the civilian schooling program.

30. Duration of Course

The listed durations of the courses are only approximate. It is incumbent on the individual student to complete the program at the earliest possible moment. He will then be assigned to a duty which will utilize his special training.

31. Reports—Civilian Industry and Trade Schools

Each student attending courses of instruction at civilian industry and/or trade schools will furnish the Chief Signal Officer, ATTN: SIGPT-2 the following information:

a. Report. Student officers training with industry will submit at the completion of training a letter report on the training received with comments and/or recommendations relative to the training program.

b. Certificate. Officers training with trade schools will submit a certificate indicating whether the training received was satisfactory. Certificate should be forwarded 1 week after completion and it should indicate name of course and period of training.

32. Suggested Subjects for Theses

In pursuing studies at the Master's and Doctor's level, it is the general requirement that the student complete and submit a comprehensive thesis covering a subject selected within the field of study being pursued. Such a thesis requires extensive study, research and concentration on the part of the student involved, and should be chosen with a view toward Signal Corps needs. In order to be of real value, the thesis should be on a subject related to military problems. Procedure for obtaining approval of thesis is contained in AR 350-200. Students selecting thesis subjects which have a direct bearing on research and development fields presently under consideration by the Signal Corps Engineering Laboratories may establish contact with the labora-

tories for background information by first contacting the Office of the Chief Signal Officer, ATTN: SIGPT-2. Before selecting a subject that will necessitate the use of a classified material, all students will be guided by SR 380-5-20. Suggested subjects for thesis projects on major fields of interest to the Signal Corps are as follows:

a. *Engineering Fields.*

- (1) *Thermionics.* Research, development, and design of tube materials; high vacuum, gaseous, oscillator, non-oscillator pickup and indicator, and storage type electron tubes.
- (2) *Radar.* Research, development, and design of equipment and systems for warning, identification, locating, navigation, and countermeasures.
- (3) *Communications.* Research, development, and design of radio and wire communication systems and components.
- (4) *Electronic Computers.* Research, development, and design of computer systems, including electronic data processing systems, of interest to the Signal Corps.
- (5) *Sound and Visual.* Research, development, and design of sonic, supersonic, visual, and infra-red equipments.
- (6) *Meteorology.* Research, development, and design of weather observation equipments and systems.
- (7) *Radio Direction Finding.* Research, development, and design on general purpose direction finding equipment, also for meteorological stations, and as aids to navigation.
- (8) *GM Control Detection.* Research, development, and design of equipment and systems for detection and countermeasures against guided missiles.
- (9) *Photographic.* Research, development and design of still and motion picture equipment, and systems for intelligence, reconnaissance and training.
- (10) *General Projects.* Research, development, and design of treatments, materials and finishes, and component parts for signal equipment, climatization and miniaturization.
- (11) *Antennas.* Research, development, and design of transmitting and receiving antennas.
- (12) *Administration.* Technical, coordination and administration services.

b. *Administrative Fields.*

- (1) The economic aspects of equipment standardization with armies of foreign countries.

- (2) Administrative control in the Army and in business.
- (3) Study of the application of "Quality Control" to administrative operation.
- (4) Procurement planning in industrial mobilization.
- (5) Development of the Department of the Army catalog system.
- (6) Supply management at the Department of the Army level.
- (7) Organization of communication zone to provide joint service.
- (8) Inventory control methods in the Army.
- (9) Effect of wartime priorities and controlled material plan.
- (10) Analysis of armed services procurement regulations to eliminate administrative delays in placing procurements.
- (11) Discussion of company policies for purchasing and a comparison with National Military Establishment procurement.
- (12) History and progress of international standardization of communication equipments and procedures.
- (13) Rapid method of depot inventories.
- (14) Rapid method of computation of Army communication equipment and maintenance requirements, manual and electronic computation.
- (15) The best method of increasing the effectiveness of an industrial (ARMY) supply installation.
- (16) The extent to which a unit of issue can be standardized.
- (17) Combining of three different work units and arriving at composite unit of another.
- (18) Training of military personnel.

33. List of Courses

The courses contained in the civilian school program are listed below. Data covering each course will be discussed in the order shown.

<i>Course</i>	<i>Level of instruction*</i>
Advanced Electronics or Electrical Engineering	Ph. D.
Communication, Electronics and Electrical Engineering	M
Computer Systems Engineering	M
Operations Research	M
General Physics	Ph. D. & M
Meteorology	M
Nuclear Engineering (Effects) Training	M
Business Administration	Ph. D. & M
Comptrollership	M

<i>Course</i>	<i>Level of instruction*</i>
International Relations	M
Education	M
Motion Picture and Television Production.....	M
Advanced Management Training	S
Industrial Management Training.....	I
Commercial Wire Communications	I
Advanced Technology	S
Television	S
Radio Systems Engineering.....	S

Other courses will be offered as special requirements arise.

*Ph.D.—Doctorate; M—Master; I—Industrial; S—Special.

34. Advanced Electronics or Electrical Engineering

a. Where Conducted. Stanford University. This type of training may be conducted at other universities.

b. Purpose. To provide a limited number of Signal Corps officers trained as leaders in scientific research in the field of electronics, capable of directing research and development projects and maintaining liaison with civilian scientists.

c. Requirements. Meet the general admission requirements and hold a degree of Master of Science from a recognized institution in the field of electronics, physics, electrical engineering, or communication engineering; have been recommended for advanced training by the university selected, or accepted for advanced training based upon previous scholastic records furnished the university selected by the Chief Signal Officer.

d. Duration of Course. From 2 to 3 academic years.

e. Level. Doctor of Philosophy.

f. Curriculum. The program of study will be determined by the officials of the university.

35. Communication, Electronics, and Electrical Engineering

a. Where Conducted. Scheduled for Stanford University, University of Illinois, and the University of Michigan. Other universities may be used.

b. Purpose. To provide advanced training for selected Signal Corps officers in the field of electronics so that they will be qualified to supervise, instruct, and participate in the development of electronics equipment and in the engineering of electronics projects.

c. Requirements. Meet the general admission requirements and hold a degree of Bachelor of Science from a recognized institution, preferably in the field of electrical engineering.

d. Duration of Course. Normally, 18 to 21 months.

e. Level. Master of Science.

f. Curriculum. To be devised by each student, with the aid of his faculty adviser, and will generally include the following:

- (1) Principles of electrical engineering.
- (2) Electrical measurements laboratory.
- (3) Differential equations.
- (4) Principles of wire communication.
- (5) Principles and application of radar.
- (6) Principles of electrical communications.
- (7) Vibration and sound.
- (8) Electrical communications laboratory.
- (9) Advanced calculus.
- (10) Electrical engineering seminar.
- (11) Pulse circuits principles.
- (12) Advanced network theory.

36. Computer Systems Engineering

a. Where Conducted. Harvard University. Other universities may be used.

b. Purpose. To provide a few Signal Corps officers trained in the fields of electronic data processing, control systems engineering, and computer systems studies including the employment of such systems.

c. Requirements. Meet the general admission requirements and hold a Bachelor's degree from a recognized educational institution, preferably in mathematics, physics, or electronics.

d. Duration of Course. Normally 21 months.

e. Level. Master of Science.

f. Curriculum. The following outline contains a partial list of the subjects often included in this course:

- (1) Numerical Analysis.
- (2) Timing Circuits and Pulse Techniques.
- (3) Engineering Statistics.
- (4) Control Accounting.
- (5) Electronic Control and Calculating Circuits.
- (6) Operations Research.
- (7) Data Processing.
- (8) Theory of Switching.
- (9) Analog Computing Devices.
- (10) Transistor Electronics.

37. Operations Research

a. Where Conducted. Johns Hopkins University and the University of Pennsylvania. Other universities may be used.

b. Purpose. To prepare selected officers to participate in or supervise operations research activities of particular interest to

the Signal Corps and to maintain liaison with operations research scientists.

c. Requirements. Meet the general admission requirements and hold a Bachelor's degree from a recognized college with a major in one of the physical sciences, mathematics, or engineering.

d. Duration of Course. Normally 18 or 21 months.

e. Level. Master of Science in Engineering.

f. Curriculum. To be developed by each student with the aid of his faculty advisor and will frequently include—

- (1) Differential Equations.
- (2) Queueing Theory.
- (3) Information Theory.
- (4) Probability and Stochastic Processing.
- (5) Linear Programming.
- (6) Mathematical Analysis.
- (7) Symbolic Logic in Computer Theory.
- (8) Operations Research Seminars.

38. General Physics

a. Where Conducted. Scheduled for the University of Virginia. Other universities may be used.

b. Purpose. To provide a few selected Signal Corps officers training in general physics. This program is designed to increase the knowledge of the Signal Corps in research, with the ultimate objective of applying this knowledge to the problems of radiological instrumentation, and related applications, in components and materials, photography, infra-red optics, thermionics, batteries, sonic devices, et cetera.

c. Requirements. Meet the general admission requirements and hold either a Bachelor's or Master's degree from a recognized university in engineering, physics, or chemistry.

d. Duration of Course. From 2 to 3 years, depending upon level of instruction.

e. Level. Satisfactory completion of this course leads to either the Master's or Doctor's degree, depending upon the level of instruction for which enrolled.

f. Curriculum. The lists in (1) and (2) below contain a partial list of the general subjects included in the course.

(1) *Physics course.*

- Mechanics.
- Heat and laboratory.
- Light and laboratory.
- Sound and laboratory.
- Electronics and electronics circuits and laboratory.
- Atomic physics and laboratory.
- Electricity and magnetism and laboratory.

Theoretical physics.
Nuclear physics and laboratory.
Atomic spectra and laboratory.
Theory and structure of solids.
Quantum mechanics.

(2) *Mathematics course.*

Differential equations.
Calculus.
Advanced Calculus.
Vector analysis.

39. Meteorology

a. Where Conducted. New York University. Other universities may be used.

b. Purpose. To provide a few selected Signal Corps officers trained in meteorology and physics of the upper atmosphere to work in the atmospheric research and development program at the Signal Corps Engineering Laboratories. This program is designed to provide trained officer personnel of the Signal Corps for the conduct of the meteorological program and upper atmospheric research activities. The ultimate object is to apply this knowledge to atmospheric problems associated with wave propagation, guided and unguided missiles, and meteorological instrumentation, et cetera.

c. Requirements. Meet the general admission requirements and hold a Bachelor's degree from a recognized university in engineering, physics, or chemistry.

d. Duration of Course. Normally 21 months.

e. Level. Master of Science.

f. Curriculum. The following list contains a partial list of the general subjects to be included in this course:

- (1) Physics of the atmosphere.
- (2) Introduction to nuclear physics.
- (3) Applied climatology.
- (4) Physical meteorology.
- (5) Function of a complex variable.
- (6) Thermodynamics of atmosphere.
- (7) Hydrodynamics.
- (8) Radar meteorology and laboratory.
- (9) Synoptic meteorology and laboratory.
- (10) Oceanography.

40. Nuclear Engineering (Effects) Training

a. Where Conducted. United States Naval Postgraduate School, Monterey, California.

b. Purpose. To qualify within the Department of the Army a limited number of officers as Nuclear Effects Engineers (MOS 7330).

c. Requirements. Officers selected for this training will satisfy the following prerequisites:

- (1) Hold a commission in the Regular Army.
- (2) Have completed undergraduate education with a minimum of 1 year of college physics. The requirement for a Bachelor's degree may be waived for students with 2 or more years of college provided they are otherwise qualified. No waiver will be granted for the minimum requirements of physics and mathematics.
- (3) Have completed differential and integral calculus and demonstrated better than average aptitude in mathematical subjects.
- (4) Meet age and service requirements as outlined in AR 350-200.
- (5) Desire to take the course.

d. Duration of Course. Approximately 3 years.

- (1) Introductory phase—It is desirable but not mandatory that applicants have satisfactorily completed the 6 weeks' Atomic Defense Officer Course at the Chemical Corps School, Fort McClellan, Alabama, or similar courses conducted at Navy and Air Force installations. Officers who do not have credit for this course may be ordered to attend a 6 weeks' Atomic Defense Officer Course at the Chemical Corps School, if available. Officers requiring refresher training will be sent to a 10 weeks' Guided Self-Study Course at the Naval Postgraduate School. This training will immediately precede phase I.
- (2) Approximately 10 months at U. S. Naval Postgraduate School (phase I). Beginning in September each year.
- (3) Two academic years at a civilian university (phase II).
- (4) Upon successful completion of phase II of this training, officers will be detailed in the Chemical Corps for approximately 2 years. The assignments given to graduates may include, besides Chemical Corps, assignments to Armed Forces Special Weapons Project, General Staff, Technical Services, Army Headquarters, major oversea command headquarters, Army Schools and boards.

e. Level. Upon successful completion of courses, officers are normally awarded a Master of Science in physics.

f. Curriculum. See AR 350-46.

g. Applications. Applications must be received in the Depart-

ment of the Army not later than 15 January of the year in which the applicant desires to begin training in phase I of the Nuclear Engineering (Effects) Training Program.

41. Business Administration

a. Where Conducted. Harvard University. Other universities may be used.

b. Purpose. Described in PHASE A, section V.

c. Requirements. Meet the general admission requirements, and should, in addition, have completed the Signal Officers Advanced Course.

d. Duration of Course. Normally 21 months.

e. Level. Master of Business Education.

f. Curriculum. To be developed by each student, with the aid of his faculty adviser, and will generally include the following subjects:

- (1) Elements of administration.
- (2) Administrative policy.
- (3) Management control of production operations.
- (4) Research administration and experimental production.
- (5) Industrial procurement.
- (6) Managerial accounting.
- (7) Personnel administration.
- (8) Production policies.
- (9) Plant planning and layout.
- (10) Business problems of the war.

42. Comptrollership

a. Where Conducted. This course will be conducted annually at the Graduate School, Syracuse University, Syracuse, New York.

b. Purpose. To prepare officers to review, estimate, adjust, and project budgets; and control and disburse appropriated funds.

c. Requirements. Officers selected for this training will meet the general admission requirements and have a military background suitable for assignment to high-level staff duty, in addition to a demonstrated capacity for advanced education.

d. Duration of Course. Approximately 18 months.

e. Level. Satisfactory completion of this course leads to a Master's degree in the fields of Business and Public Administration.

f. Curriculum. The curriculum for the individual officer will be arranged by the faculty advisers under the supervision of the Assistant to the Dean, Maxwell Graduate School of Public Affairs and Citizenship, and will generally include the following subjects:

- (1) Budgeting.
- (2) Economies of public finance.
- (3) Controllership and public budgeting.
- (4) Problems in public budgeting.
- (5) Business budgetary principles and practices.
- (6) Business administration.
- (7) Federal budgetary administration.

43. International Relations

a. Where Conducted. Scheduled to be conducted at George Washington, Georgetown, and New York Universities. Other universities may be used.

b. Purpose. The International Relations Course will provide selected officers with the ability to determine the military aspects of foreign policy and to prepare estimates of current situations as they affect the Army.

c. Requirements. Officers selected for these courses must meet the same general qualifications as for other graduate training of this level.

d. Duration of Course. Normally, 18 months.

e. Level. Satisfactory completion leads to a Master's degree.

f. Curriculum. Will be developed when required.

44. Education

a. Where Conducted. Stanford University, Syracuse University. Other universities may be used.

b. Purpose. To provide a limited number of Signal Corps officers qualified to supervise and direct the widespread and diverse training activities of the Signal Corps.

c. Requirements. Meet the general admission requirements and hold a degree of Bachelor, preferably in one of the social studies, from a recognized educational institution.

d. Duration of Course. Normally 18 to 21 months.

e. Level. Master of Arts.

f. Curriculum. To be devised by each student, with the aid of his faculty advisor, and will generally include the following:

- (1) Philosophy of Education.
- (2) Educational Psychology.
- (3) Educational Statistics.
- (4) Methodology in Education.
- (5) Audio-Visual Aids in Education.
- (6) Educational Administration.
- (7) Curriculum Planning.
- (8) Educational Measurements.

45. Motion Picture and Television Production

a. Where Conducted. The Motion Picture and Television Production Course is conducted at the University of Southern California. Other universities may be used.

b. Purpose. The purpose of the course is to provide advanced training for selected Signal Corps officers in the field of motion picture and television to supervise and instruct in the field of motion picture and television production.

c. Requirements. Officers selected for this training will meet the general admission requirements outlined in paragraph 26 and hold a degree of Bachelor of Arts or Bachelor of Science from a recognized institution.

d. Duration of Course. Normally 21 months.

e. Level. Satisfactory completion of the course of instruction, leads to the degree of Master of Science.

f. Curriculum. Will be devised by each student with the aid of his faculty adviser, and Chief, Army Pictorial Service Division, Office of the Chief Signal Officer.

46. Advanced Management Training

a. Where Conducted. This course is conducted at Harvard University and the University of Pittsburgh.

b. Purpose. To provide Signal Corps officers with advanced education in the fundamentals of Business Management or Comptroller type training. Completion of training will enable officers to fill appropriate key positions in Department of the Army agencies and headquarters of major continental and oversea commands.

c. Requirements. Officers selected for this training will—

- (1) Meet the general admission requirements and in addition have completed the Signal Officers' Advanced Course.
- (2) Be a colonel or above for attendance at Harvard Advanced Management Course and lieutenant colonel or above for attendance at the Management Problems for Executives course at the University of Pittsburgh.
- (3) Demonstrate qualities of leadership, ability, and adaptability in executive type positions.
- (4) Preferably hold a Bachelor's degree from a recognized college or university.
- (5) Have broad command and staff experience.

d. Duration of Course. Nine to 13 weeks.

e. Level. No degree granted.

f. Curriculum. General subjects of the course are as listed below:

- (1) Administrative practices.
- (2) Cost and financial administration.
- (3) Production organization and engineering.
- (4) Marketing problems.
- (5) The supervisor and union labor.
- (6) Corporate organization and administration.

g. Reference. SR 350-230-51.

47. Industrial Management Training

This is PHASE B of the Industrial Mobilization Training Program as described in section V.

a. Where Conducted. This training has been conducted at the following firms: General Cable Company, Kellogg Switchboard and Supply Company, General Electric Company, Western Electric Company, Radio Corporation of America, International Telephone and Telegraph Company, SKF Industries, Incorporated, Turner Brass Works, Association Motion Picture Producers, Incorporated, and General Radio.

b. Purpose. The primary purpose of this training is to produce officers who are qualified to perform industrial mobilization duties for the Signal Corps.

c. Requirements. Officers selected for this training will—

- (1) Meet the general admission requirements.
- (2) Be less than 42 years of age when enrolled.
- (3) Have completed PHASE A of the Industrial Mobilization Training Program.

d. Duration of Course. Three months.

e. Level. No degree granted.

f. Curriculum. Subjects of the on-the-job training program will be essentially as follows:

- (1) Production.
- (2) Production control.
- (3) Personnel management.
- (4) Plant layout.
- (5) Procurement planning.
- (6) Materials.
- (7) Handling methods.
- (8) Product design.
- (9) Inspection and quality control.
- (10) Financial and budget control.
- (11) Service utilities management and control.

48. Commercial Wire Communications

a. Where Conducted. This course will be conducted in three phases. Phase I will be conducted at one of the following companies: New Jersey Bell Telephone Company, Newark, New Jersey; The New York Telephone Company, Brooklyn, New York; the Chesapeake and Potomac Telephone Company, Baltimore, Maryland. Phase II will be conducted at The Signal School, Fort Monmouth, New Jersey, and Phase III will be conducted at American Telephone and Telegraph Company, New York, New York. Other Long Lines company may be used.

b. Purpose. To train qualified Signal Corps officers in the applied techniques of commercial wire communications. The course will provide on-the-job training so that each officer will become thoroughly familiar with all phases of wire communications. It is expected that upon completion of the course, each officer will be so assigned that full value will be obtained from the training.

c. Requirements. Officers selected for this training will—

- (1) Meet the general admission requirements.
- (2) Be a graduate of the Signal Officers Advanced Course or possess the necessary equivalent in wartime practical experience.
- (3) Have an aptitude for work in wire telephony.
- (4) At least 2 years of college, including mathematics through trigonometry, and physics.

d. Duration of Course. Sixty-two weeks.

e. Level. No degree is granted.

f. Curriculum. The course of instruction will be approximately as outlined below.

- (1) Teletype and step by step dial central office fundamentals.
- (2) Splicing and testing: Emergency, advanced testing, capacity unbalance, cable fault location.
- (3) Installation: Fundamentals, key plans, and P.B.X.
- (4) Repairs test desk: Fundamentals, key plans, and P.B.X.
- (5) Central office: Fundamentals of manual, circuits and power, trunks—manual and dial, test desk, miscellaneous auxiliary circuits.
- (6) Engineering: Toll engineering, traffic engineering and methods, dial cutover procedure, and general review.
- (7) Long lines carrier, repeater and transmission principles and circuits.
- (8) Microwave fundamentals and components.
- (9) Site location and engineering planning.

49. Advanced Technology Course

a. *Where Conducted.* RCA Institutes, Inc.

b. *Purpose.* To train Warrant Officers in basic specialized branches of the Electrical Communications, such as transmitter technician with radio broadcasting companies; testing or field servicing; research or laboratory work with manufacturing organizations; transmitter or receiver operating with radio communication companies. The officer is not limited to one particular field of endeavor, but is in a position to choose intelligently the field which he wishes to follow as a career.

c. *Requirements.* Be a high school or junior college graduate.

d. *Duration of Course.* Two or 2¼ calendar years.

e. *Level.* No degree is granted.

f. *Curriculum.* This course will generally include the following subjects:

- (1) Physics I.
- (2) Algebra I, II, III.
- (3) Geometry.
- (4) Technical Arithmetic.
- (5) Mechanics—Electrical Physics.
- (6) Trigonometry.
- (7) Drafting I, II.
- (8) Calculus I, II, III.
- (9) Optics—Radiation—Atomic Structure.
- (10) Advanced A-C Theory.
- (11) Vacuum Tubes.
- (12) Architectural Acoustics.
- (13) Audio Components and Systems.
- (14) Television and FM Transmitters and Receivers.
- (15) Electron Optics.
- (16) Electromagnetic Radiation and Antennas.

50. Television

a. *Where Conducted.* This course will be conducted by a civilian communication industry, probably RCA.

b. *Purpose.* To qualify a limited number of officers and Warrant Officers for assignment as instructors and supervisors in the application of television to military use.

c. *Requirements.* Below the grade of major with radio or electronics experience.

d. *Duration of Course.* Six months.

e. *Level.* Special. No degree granted.

f. *Curriculum.* This course will generally include the following subjects:

- (1) RMA standards.
- (2) Mixing circuit constants and characteristics.
- (3) Television and FM IF amplifiers, second detector and AVC.
- (4) Video amplifiers and synchronizing impulse separators.
- (5) Vertical and horizontal sweep oscillators.
- (6) Antenna circuits and test equipment.
- (7) Kinescopes, Signal phasing and pickup tubes.
- (8) Scanning problems and optical systems.
- (9) Picture shading and blanking.
- (10) Coaxial cable transmission and other transmitting equipment.

51. Radio Systems Engineering

a. Where Conducted. RCA Institutes, Inc.

b. Purpose. To train officers to plan and supervise the design, construction, operation, and maintenance of fixed plant installations of a point-to-point radio communication system.

c. Requirements. Permanent grade of first lieutenant with a minimum of 7 years military service. A major portion of this service should have been in the radio or electronic fields.

d. Duration of Course. Approximately 13 weeks.

e. Level. Special. No degree is granted.

f. Curriculum. General subjects of the course are listed below:

- (1) Introduction and general description.
- (2) Translation of service requirements.
- (3) Study of high frequencies.
- (4) Antennas.
- (5) Power supply.
- (6) Transmitting station facilities.
- (7) Receiving.
- (8) Terminal office.
- (9) System control.
- (10) General review and critique.

52. On-the-Job Training

Training discussed in paragraph 48, "Commercial Wire Communications," paragraph 50, "Television," and paragraph 51, "Radio Systems Engineering," is not to be confused with PHASE B of the Industrial Mobilization Training Program. These courses are designed to provide on-the-job training for Signal Corps officers in the preparation for fixed and mobile type communication assignments throughout the world. No degree is granted and assignments are restricted to technically qualified

officers presently on similar assignments in the Signal Corps, or in preparation for such an assignment.

53. Duration of Courses

The listed durations of the courses are only approximate. It is incumbent on the individual student to complete the program at the earliest possible moment. He will then be assigned to a duty which will utilize his special training.

SECTION VII

SPECIAL COLLEGE PROGRAM FOR ALL OFFICERS

54. Scope

The plan outlined in this selection provides educational opportunities at the undergraduate college level for all officers, Regular, Reserve, commissioned and warrant, on extended active duty. While participation is voluntary, the Chief Signal Officer encourages each officer concerned to take advantage of this training opportunity. By careful planning an officer may arrange an off-duty program of integrated studies which will lead to the attainment of either or both of the objectives specified below.

55. Objectives

a. The primary objective of this program is the completion of the 2-year college level of education by all officers.

b. The ultimate objective of this program is the attainment of a baccalaureate degree by the greatest possible number of officers.

56. Methods of Attaining Goals

The objectives of the program may be met by each officer utilizing one or more of the following methods:

a. Group study classes on Army installations.

b. USAFI self-teaching or correspondence courses.

c. Extension or residence courses offered by civilian institutions.

d. College and university correspondence courses.

e. General educational development tests. These tests are at high school and first year college level. Many colleges allow 24 semester hours for the successful completion of the college level test.

f. Accreditation for service experience. When arrangements can be made with an accredited school, each officer concerned should obtain an evaluation of the college credits he may be granted on his military experiences and service schooling.

57. Reference

Detailed information is contained in AR 355-30.

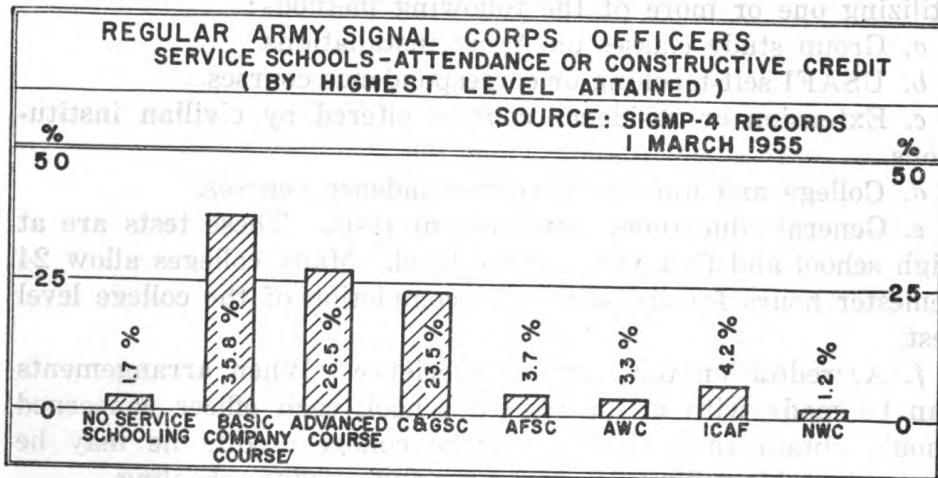
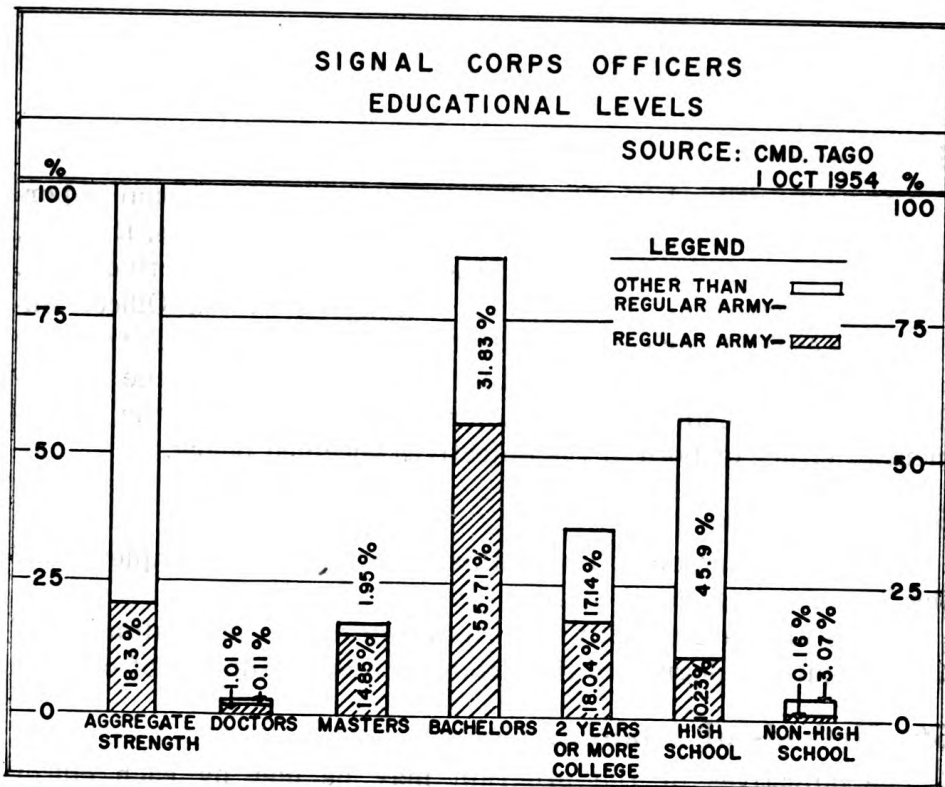


Figure 3. Signal Corps Officers Educational Levels.

SECTION VIII

EXTENSION COURSES

58. General

The purpose of the Signal Corps Extension Course is to further the military education of Signal Corps reservists and military personnel of all components and grades in active Federal service. The Signal School, Fort Monmouth, New Jersey, is responsible for conducting the program in accordance with AR 350-60. It also administers common subcourses which provides instruction in subjects common to two or more arms and services. These common subcourses are prepared by the school or the arm or service having primary interest, but are administered by The Signal School for its registered students.

59. Arrangement of Courses

a. The Signal Corps Extension Course Program consists of five series of subcourses from the 10 through 50 series. Each series corresponds to the levels of instruction indicated below:

<i>Series</i>	<i>Designed for—</i>
10	Basic precommission.
20	Second lieutenants.
30	First lieutenants.
40	Captains.
50	Majors.

The 60-series course is applicable to lieutenant colonels and is administered by Command and General Staff College.

b. Each series consists of subcourses containing three or more lessons arranged in progressive order paralleling the resident instruction at The Signal School.

c. Special series of subcourses are available to students interested in pursuing career programs. Optional subcourses are also available to all students upon separate request. Completion of a regular series is not required for enrollment in either the special or optional subcourses.

60. Enrollment

Procedures for enrollment in Signal Corps Extension Courses are contained in AR 350-60. DA Pam 20-100 lists the latest courses.

SECTION IX

READING LIST

A list of books recommended for reading has been prepared for the officers who may not have access to adequate library catalogs and literary works of special value in their military education.

61. Administration and Management

- Barnard, C. I.—The Functions of the Executive. Harvard University Press, 1938.
- Beishline, John R.—Military Management for National Defense, Prentice-Hall, 1950.
- Berneys, Edward L.—Public Relations. University of Oklahoma Press, 1952.
- Bernhardt, Karl S.—Practical Psychology. McGraw, 1945.
- Bray, Charles W.—Psychology and Military Efficiency. Princeton University Press, 1948.
- Charlesworth, James G.—Governmental Administration. Harper, 1951.
- Cooper, A. M.—How to Conduct a Conference. 2d ed. McGraw-Hill, 1946.
- Fayol, Henri—General and Industrial Management. Pitman, 1949.
- Flesch, Rudolf F.—Art of Plain Talk. Harper and Brothers, 1946.
- Flesch, Rudolf F.—Art of Readable Writing. Harper and Brothers, 1949.
- Goetz, Billy—Management Planning and Control. McGraw-Hill, 1949.
- Gulick, Luther H.—Administrative Reflections from WW II. University of Alabama Press, 1948.
- Heckert, J. B.—Controllorship. Ronald, 1952.
- Klein, David—The Army Writer. 3d ed. Military Service Publication Company, 1951.
- Lepawsky, Albert—Administration. Knoff, 1949.
- McCurdy, John T.—Structure of Morale. Macmillan, 1943.
- Schell, Erwin H.—Techniques of Administration. McGraw, 1951.
- Scott, Walter and others—Personnel Management. McGraw, 1949.
- Terry, George R.—Principles of Management. Irwin, 1953.
- U. S. Office of Strategic Services—Assessment of Men. Rinehart, 1948.

62. Atomic Energy

- Brodie, Bernard—The Absolute Weapon. Harcourt, 1946.
- Glasstone, Samuel—Source Book on Atomic Energy. Van Nostrand, 1950.
- Dietz, D.—Atomic Science, Bombs and Power. Dodd, 1954.
- Gray, Dwight E.—Radiation Monitoring in Atomic Defense. Van Nostrand, 1951.
- Hecht, Selig—Explaining the Atom. Viking Press, 1954.
- Lapp, R. E.—The New Force. Harper, 1953.
- Lenihan, J. M. A.—Atomic Energy and Its Applications. London, Pitman, 1954.
- Leyson, Burr—Atomic Energy in War and Peace. Dutton, 1951.
- Miksche, F. O.—Atomic Weapons and Armies. Praeger, 1955.

- Sacks, Jacob—*The Atom at Work*. Ronald, 1951.
 Smyth, Henry DeW.—*Atomic Energy for Military Purposes*. Princeton University Press, 1945.
 Woodbury, David Oakes—*Atoms for Peace*. New York, Dodd, Mead, 1955.

63. Communism

- Einaudi, Mario and other—*Communism in Western Europe*. Cornell University Press, 1951.
 Hunter, Edward—*Brain-washing in Red China*. Vanguard, 1951.
 Kinter, William R.—*Front Is Everywhere*. University of Oklahoma Press, 1950.
 Salvadori, Massimo—*The Rise of Modern Communism*. Henry Holt & Co. New York, 1952.
 Seton-Watson, Hugh—*Lenin to Malenkov*. Frederick A. Praeger, N. Y., 1953.
 Stowe, Leland—*Conquest by Terror, the Story of Satellite Europe*. Random House, 1952.
 U. S. Congress—*Communism; its Plan and Tactics*. Infantry Journal Press, 1948.
 Rigg, Robert B.—*Red China's Fighting Hordes*. Military Service, 1951.

64. Education

- Bartky, John A.—*Supervision as Human Relationships*. Heath, 1953.
 Burton, William H.—*Guidance of Learning Activities*. 2d ed. Appleton, 1952.
 Carroll, Herbert A.—*Mental Hygiene; the Dynamics of Adjustment*. Prentice-Hall, 1952.
 Dewey, John—*Democracy and Education*. Macmillan, 1948.
 Ginzberg, Eli and others—*Occupational Choice*. Columbia University Press, 1953.
 Grace, Alonzo—*Educational Lessons from War-time Training*. American Council on Education, 1948.
 Killer, Franklin J.—*Principles of Vocational Education*. Heath, 1948.
 Lindquist, E. F.—*Educational Measurements*. American Council on Education, 1951.
 McNerney, Chester T.—*Educational Supervision*. McGraw-Hill, 1951.
 Pignors, Paul and Myers, Charles A.—*Personnel Administration*. 2d ed. McGraw-Hill, 1951.
 Pressey, S. L. and Robinson, F. P.—*Psychology and the New Education*. Harper, 1944.
 Reavis, W. C. and Judd, C. H.—*Teacher and Educational Administration*. Houghton-Mifflin, 1942.
 Robinson, Francis P.—*Effective Study*. Harper, 1946.
 Rugg, Harold O.—*Teacher of Teachers; Frontiers of Theory and Practice in Teacher Education*. Harper, 1952.
 Shaffer, Laurence F.—*Psychology of Adjustment*. Houghton-Mifflin, 1936.
 Spears, Harold—*Principles of Teaching*. Prentice-Hall, 1951.
 Wiles, Kimball—*Supervision for Better Schools*. Prentice-Hall, 1950.
 Wittich, Walter A.—*Audio-visual Materials*. Harper, 1953.

65. Korea

- Gugeler, Russell A.—*Combat Action in Korea*. Washington Combat Forces Press, 1954.
- Oliver, Robert T.—*Why War Came in Korea*. Fordham University Press, 1950.
- Taylor, Gordon O.—*Canada Department of Mines and Technical Surveys. Korea; a Geographical Appreciation*. 1951.
- Westover, John Glendower—*Combat Support in Korea*. Washington Combat Forces Press, 1955.
- White, W. L.—*Back Down the Ridge*. Harcourt, Bruce, 1953.

66. Military Biography

- Ballard, Colin R.—*The Military Genius of Abraham Lincoln*. World Publishers, 1952.
- Bradley, Omar N.—*A Soldier's Story*. Holt, 1952.
- Burlingame, Roger—*General Billy Mitchell, Champion of Air Defense*, McGraw-Hill, 1952.
- Clark, Mark W.—*Calculated Risk*. Harper, 1950.
- Clay, Lucius D.—*Decision in Germany*. Doubleday, 1950.
- Cowles, V. S.—*Winston Churchill: The Era and the Man*. Harper, 1953.
- Eisenhower, Dwight D.—*Crusade in Europe*. Doubleday, 1948.
- Grant, Ulysses—*Personal Memoirs*. ed by E. B. Long, World Publishing Company, 1953.
- Guderian, Hans—*Panzer Leader*. Dutton, 1952.
- Harr, Bill—*Combat Boots*. Exposition Press, 1952.
- Lindbergh, Charles A.—*The Spirit of St. Louis*. Scriber, 1953.
- Panlilo, Yay—*The Crucible; an Autobiography by "Colonel Yay."* Macmillan, 1950.
- Patton, George S.—*War as I Knew It*. Houghton, 1949.
- Young, Desmond—*Rommel; the Desert Fox*. Harper, 1950.
- Rommel, Erwin—*The Rommel Papers*. Harcourt-Brace, 1953.

67. Military History

- Creasy, Edward S.—*Fifteen Decisive Battles*. Everyman's Library. Dutton, 1952.
- Creswell, John—*Generals and Admirals, the Story of the Amphibious Command*. Longmans, Green, 1953.
- Earle, Edward M.—*Makers of Modern Strategy*. Princeton University Press, 1948.
- Goerlitz, Walter—*History of the German General Staff*. Praeger, 1953.
- Henry, R. S.—*Story of the Confederacy*. Grosset and Dunlap, 1937.
- Lincoln, C. H.—*Narratives of the Indian Wars, 1675-1699*. Barnes & Noble, 1952.
- MacMillan, George—*The Old Breed*. Infantry Journal, 1949.
- Marquand, J. P.—*Melville Goodwin, USA*, Little, Brown, 1951.
- Oman, C. W. C.—*Art of War in the Middle Ages*. Cornell University Press, 1953.
- Steele, Matthew F.—*American Campaigns*. Vol. 1—Text. Military Service Publication Company, 1949.

68. Military Science

- Chandler, Stedman & Robb, Robert W.—Front Line Intelligence Combat Forces, 1946.
- Farago, L.—War of Wits. Funk; Ryerson Press, 1954.
- Gavin, James M.—Airborne Warfare. Washington, Infantry Journal Press, 1947.
- Glass, Robert R.—Intelligence Is for Commanders. Military Service, 1948.
- Harvey, I.—Arms and Tomorrow. Clowes, 1954.
- Hittle, James D.—Military Staff. Military Service Publishing Co., 1949.
- Kent, Sherman—Strategic Intelligence. Princeton, 1951.
- Liddell, Hart—Revolution in Warfare. Yale University Press, 1947.
- Ross, Frank J., Jr.—Guided Missiles; Rockets and Torpedoes. Lothrop, Lee, 1951.
- Stouffer, Samuel—Studies in Social Psychology in World War II, Vol. 1 and 2—The American Soldier. Princeton University Press, 1949-50.
- U. S. Department of Defense—The Armed Forces Officer. GPO, 1950.
- Wavell, A. P. W.—Soldiers and Soldiering. Clarke, Irwin, 1954.

69. National Defense

- Barrett, E. W.—Truth Is Our Weapon. Funk & Wagnalls, 1953.
- Huzat, Elias—The Purse and the Sword. Cornell University Press, 1950.
- Nelson, Otto L.—National Security and the General Staff. Infantry Journal Press, 1946.
- Lerner, Daniel, ed.—Propaganda in War Crisis. Stewart, 1951.
- Lincoln, George A.—Economics of National Security. Prentice, 1950.
- Prentiss, Augustin M.—Civil Defense in Modern War. McGraw, 1951.
- Pratt, Fletcher—War for the World. Yale University, 1951.
- Rosenbloom, M. V.—Peace through Strength; Bernard Baruch and a Blueprint for Security. Farrar, Strauss & Young, 1953.
- Smith, Louis—American Democracy and Military Power. University of Chicago Press, 1952.
- Sweet, Joseph B.—The Price of Survival. Military Service, 1950.
- Sprout, Harold—Foundations of National Power. Van Nostrand, 1945.

70. Science-History and Biography

- Baxter, James P.—Scientists Against Time. Little, Brown, 1950.
- Bliven, Bruce—Preview for Tomorrow; the Unfinished Business of Science. Knoff, 1952.
- De Forest, Lee—Father of Radio. Follet, 1950.
- Dunlap, Orrin E.—Radio's 100 Men of Science. Harper, 1944.
- Kaempfert, W. B.—Explorations in Science. Viking, 1953.
- Morris, Lloyd—Ceiling Unlimited; the Story of American Aviation from Kitty Hawk to Supersonics. Macmillan, 1953.
- Ross, Frank X.—Flying Windmills; Story of the Helicopter. Lothrop, Lee, 1953.
- Theismeyer, Lincoln R.—Combat Scientists. Little, Brown, 1947.

71. Signal Corps

- Codding, G. A.—International Tele Communications Union; an Experiment in International Cooperation. Netherland, Brill (Academic Press) 1952.

- Harris, Lionel H.—Signal Venture. Lond, Gale & Polden, 1951.
 Meredith, Roy—Mr. Lincoln's Camera Men; Mathew B. Brady. Scribner, 1951.
 U. S. Department of Army History Division—The Signal Corps (In Press).

72. World Affairs

- Ballantine, J. W.—Formosa. Brookings Institute, 1952.
 Bate, H. M.—Report from Formosa. Dutton, 1952.
 Borton, Hugh—Japan. Cornell University Press, 1952.
 Brown, George W.—Canada. University of California, 1950.
 Brown, Wm. Norman—The U. S. and India and Pakistan. Harvard University Press, 1953.
 East, Gordon—The Changing Map of Asia. Dutton, 1950.
 Fenichell, Stephens—United Nations. Cornell University Press, 1951.
 Ferguson, J. M.—The American System of Government. McGraw-Hill, 1953.
 Fitzgerald, Walter—Africa. 7th ed. Dutton, 1950.
 Flenley, R.—Modern German History. Dutton, 1953.
 Freeman, Otis W.—Geography of the Pacific. Wiley, 1951.
 Friis, Henning K.—Scandinavia Between East and West. Cornell University Press, 1950.
 Frye, Richard N.—The Near East and the Great Powers. Harvard University Press, 1951.
 Guillaume, Augustin—Soviet Arms and Soviet Power. Combat Forces, 1949.
 Hailey, V. Osgood—A History of the Pacific Area in Modern Times. Houghton, 1949.
 Hofmeyr, J. H.—South Africa. 2d ed. McGraw-Hill, 1952.
 Inman, Samuel G.—Latin America. Harcourt, 1947.
 Kerner, Robert, ed.—Yugoslavia. University of California, 1949.
 Le Bourdais—Canada's Century. Praeger, 1951.
 McCune, George M.—Korea Today. Harvard, 1950.
 Muntz, T. G. A.—Turkey. Philosophical Library, 1951.
 Pounds, N. J. G.—The Ruhr; a Study in History and Economic Geography. Indiana University Press, 1952.
 Reitzel, William—The Mediterranean; its Role in America's Foreign Policy. Harcourt, 1949.
 Roucek, Joseph—Balkan Politics. Stanford University Press, 1948.
 Thomas, Lewis V.—U. S. and Turkey and Iran. Harvard University Press, 1951.
 U. S. Military Academy—Contemporary Foreign Government. 3d ed. Rinehart, 1953.
 Vernadasky, George—A History of Russia. Yale University Press, 1951.
 Ward, Barbara—The West at Bay. Norton, 1948.
 Wilber, Donald N.—Iran. Princeton University Press, 1950.

73. World War II

- Burne, Alfred H.—Strategy in World War II. Military Service, 1947.
 Churchill, Winston—The Second World War—Vols. 1–6, Houghton, 1949–1953.
 Eichelberger, Robert L.—Our Jungle Road to Tokyo. Viking, 1950.
 Fuller, J. F. C.—The Second World War. Duell, Sloan, 1949.

- Lerner, Daniel—Sykewar; Psychological Warfare Against Germany, D-Day to VE-Day. Stewart, 1949.
- Liddel, Hart—The German Generals Talk. Morrow, 1949.
- Marshall, S. L. A.—The River and the Gauntlet. Morrow, 1953.
- Marshall, King & Arnold—War Reports. Lippincott, 1947.
- Norman, Albert—Operation Overload. Military Service Publishing Company, 1952.
- U. S. Department of the Army—U. S. Army in World War II. The War Department, Chief of Staff, Prewar Plans & Preparations. GPO, 1950.
- Uris, Leon M.—Battle Cry. Putnam, 1953.

APPENDIX I

APPLICATION FORM (DA FORM 1618-R)

APPLICATION FOR DETAIL AS A STUDENT OFFICER IN THE CIVIL SCHOOLING PROGRAM						Date	
TO:							
1. Last name - First name - Middle name				2. Service No.		3. Br of Service	4. Date of Birth
5. Grade		6. Branch in which permanently commissioned (If detailed in another branch, so indicate)			7. Present status & assignment (Include complete address)		
Permanent	Date						
Temporary	Date						
8. Foreign Service Since 7 December 1941							
Place		Date (Mo. and Yr)		Place		Date (Mo. and Yr)	
		From	To			From	To
						9. Date will return to CONUS, if now on Foreign Service	
10. Colleges or Universities Attended							
Name and Location		Inclusive Dates		Degree	Major	Class Standing	Total in Cl.
		From	To				
11. Service Schools Attended (or equivalent credit)							
Name		Inclusive Dates		Name		Inclusive Dates	
		From	To			From	To
12. Courses Desired (You may name one or more in order of preference)							
Course				Name of Institution or Industry			

DA Form 1618-R, 1 Jan 56 Replaces DA Form 5642, which is obsolete.

APPENDIX I—Continued

<p>13. If Business Administration or Industrial Management is applied for, complete the following: (Not applicable to Combat Arms Officers) I <input type="checkbox"/> do <input type="checkbox"/> do not apply for enrollment and continuation in the Industrial Mobilization Training Program as prescribed in SR 350-70-1.</p>	
<p>14. Outline your special qualifications including resume of actual experience which you feel recommends you for advanced study in your selected fields. (Continue in Item 16 or use additional sheets if necessary)</p>	
<p>15. Transcripts of academic records from the following universities are attached (Transcripts of ALL colleges must be attached)</p>	
<p>16. Remarks</p>	
<p>If I am selected to attend any course for which I have expressed a preference, I intend to complete the course of instruction and thereafter remain on active duty for a period of four years. I hereby waive any right to resign or otherwise be relieved from active duty prior to a date four years subsequent to the completion of such schooling unless I am sooner relieved for the convenience of the Government.</p>	
Typed or printed name of applicant	Signature

[AG 353 (13 Jun 55)]

By Order of *Wilber M. Brucker*, Secretary of the Army:

MAXWELL D. TAYLOR,
General, United States Army,
Chief of Staff.

Official:

JOHN A. KLEIN,
Major General, United States Army,
The Adjutant General.

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MDW (5)	PMST (2)
Armies (10)	MAAG (5)
Corps (5)	Mil Msn (5)
Div (5)	

NG: State AG (3).

USAR: None.

For explanation of abbreviations used, see SR 320-50-1.

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